

PCT/US02/03608

## ACTIVITY BASED PROBE ANALYSIS

## ABSTRACT OF THE DISCLOSURE

[0188] Methods and compositions are described for analyzing complex protein mixtures using fluorescent activity-based probes. In particular, probes that specifically react with and bind to the active form of one or more target proteins are employed. Fluorescent signals obtained from the labeled active target proteins can be related to the presence or amount of active members of the desired target protein class. The methods and compositions described herein can be used, for example, to provide diagnostic information concerning pathogenic states, in identifying proteins that may act as therapeutic targets, and in drug discovery.